

SENIOR CIVIL ENGINEER

DEFINITION

To plan, coordinate, supervise and participate in development and review of complex transportation planning, traffic engineering, land development, capital improvements and special projects; to provide complex and advanced level professional engineering support involving research, planning, design and construction of various land development and engineering projects.

SUPERVISION RECEIVED AND EXERCISED

Receives general direction from an assigned department or assistant department head.

Exercises direct supervision over assigned professional, technical and clerical staff.

ESSENTIAL FUNCTIONS – Functions may include, but are not limited to, the following:

Manage, supervise and organize the work of assigned major functions in land development, engineering and operations projects; provide complex and advanced level professional engineering support involving research, planning, design and construction of various engineering projects.

Responsible for a particular phase in the proper design, construction or operation of public works facilities, for the work of staff and equipment in the maintenance and improvement of streets, street related facilities, sanitary sewers, or storm drains within the City or the construction of City buildings and parks facilities.

Assign, supervise, direct, and act upon the solution to engineering problems in connection with the design and construction of various public works facilities including highway and street improvements, sanitary sewers, storm drains and flood control facilities, traffic signals, street lights and bridges or in connection with the design and construction of various public facilities including buildings, parks and other related projects.

Evaluate and advise on the operations and activities of assigned responsibilities; recommend improvements, changes and modifications; prepare various reports on operations and activities.

Ensure that workflow progresses in an efficient and timely manner to meet the goals of the City.

EXAMPLES OF ESSENTIAL FUNCTIONS:

Review plans and designs for conformance with standards and specifications; review and prepare land development plans, construction documents, encroachment permit applications.

Assist in claims negotiations and resolution.

Participate in budget preparation and administration of sections operational budget, sewer budget and Capital Improvement Project (CIP) budget; prepare cost estimates for budget recommendations; monitor and control expenditures.

Prepare and review weekly/monthly status reports to review and ensure cost and quality controls in all project activities.

Participate in the selection of staff; coordinate staff training; conduct performance evaluations; recommend and implement discipline procedures as directed.

Answer questions and provide information to the public; investigate complaints and recommend corrective action as necessary to resolve complaints.

Writes complicated and highly technical engineering reports.

Maintain various engineering reference documents for public information including official maps and plans.

Review and monitor inter-agency agreements; confer and coordinate the planning and construction of public works facilities or the construction of city buildings and parks with other City personnel representatives from other departments, other public and private agencies, and the public regarding engineering and construction aspects of City work.

Prepare and review Council agenda statements; conduct meetings and make presentations.

Represent the City at designated commission meetings and serve on various committees as requested.

Meet and confer with developers, contractors, engineers and the general public relative to City policies, regulations and procedures.

Build and maintain positive working relationships with co-workers, other employees and the public using principles of good customer service.

Perform other related duties as assigned.

Assign, supervise and direct plan checking for maps and plans as related to the land development process including tentative parcel and final subdivision maps, building

permits, and their compliance with the Municipal Code and the State Subdivision Map Act; issue various engineering permits.

Administers the acquisition of rights-of-way for public works facilities and compliance with regulations governing the eminent domain process.

Review and prepare environmental documents.

Administer a city-wide program of construction and maintenance of streets, traffic signing and striping, sidewalks, sanitary sewers, storm drains, street trees, and public buildings; periodically inspects streets and related structures for deficiencies and recommends corrective action and priorities of work; supervises the preparation of work schedules and the initiation of maintenance projects.

Participates in the long range planning of public works facilities maintenance and construction projects; reviews development and construction plans and makes recommendations on the maintainability of development and construction projects.

Submits recommendations for approval of standard plans and specifications, completed construction drawings, cost estimates and contract documents, tentative maps, parcel maps and final subdivision maps, reports and environmental documents, preliminary plans and studies.

Administer the collection of various engineering fees that includes the fees for maintenance and operation of the City sewer collection system as well as administering the various agreements with the Metropolitan Sewer System and other Metro agencies.

Administer various proceedings for funding the design and construction of public works facilities using State Gas Tax, 1911 and 1913 Act special assessment districts, development impact fees, Proposition "A" Sales Tax, Mello Roos, Federal Highway Funds, and Transportation Improvement Project Funds.

Manage construction projects from inception through completion including selection of project site, development of plans, and obtaining government clearances and permits.

Prepare cost budgets, value engineering analysis, write Request for Proposals (RFPs) ; interview prospective bidders; give recommendations for bidder selection.

Coordinate with Project Team all procedures, correspondence, etc and ensure they are in accordance with Operations' Manual.

Coordinate and participate in special inspections through various stages of construction.

Review contractor billings, subcontractor billings, and control expenditures to stay within project budget.

Review all requests for information document (RFIs), change orders, architectural supplemental instruction (ASIs) and all correspondence relating to each project.

Monitor project compliance and Safety and Quality Control Programs.

Conduct/attend weekly meetings with project team to verify the project schedules and review any work change orders that may affect the outcome of the projects.

Coordinate with Building Division of the Building and Planning Department to ensure that all building plans and specifications are in compliance with all State and local building regulations.

Assist in the preparation of bid specifications, contracts, and budget.

Insure contractor compliance with various governmental building regulations.

Prepare rough sketches and drawings.

Perform other related duties as assigned.

MINIMUM QUALIFICATIONS

Knowledge of:

Principles and practices of civil engineering as related to municipal public works activities or building contract administration.

Value Engineering methodologies.

Engineering principles, analyses, programs, procedures, practices and techniques pertinent to the functions of the sections supervised.

Grading, improvements, drainage systems, sanitary sewer and water systems and the land development engineering entitlement process.

Basic management and supervisory methods, including appropriate disciplinary procedures.

Pertinent local, state and federal laws, ordinances and rules.

Principles and practices of work safety.

Principles and practices of assigning and reviewing the work of others.

Computer equipment and software applications related to area of assignment

Principles and practices of design and the preparation of engineering plans, specifications, cost estimates and control documents, traffic control practices, and methods and procedures for analyzing traffic patterns and growth;

Different construction delivery methods such as hard bidding, design/build and construction management services.

Current methods of building construction and related trade work.

Method of evaluating the need for building renovations or alterations.

Ability to:

On a continuous basis, analyze budget and technical reports; interpret and evaluate staff reports; know laws, regulations and codes; observe performance and evaluate staff; problem solve division related issues; remember various rules and procedures; and explain and interpret policy.

Organize and implement project, operations and activities related to work assignments.

Effectively manage the operation of a major engineering function or a large construction project.

Review and interpret plan, specifications, codes and regulations pertaining to assigned area.

Supervise, train and evaluate assigned staff.

Prepare reports, specifications and contract documents.

Communicate and coordinate with the public and other departments such as public and private agencies.

Ability to:

Establish and maintain effective working relationships with City personnel and the public.

Perform the most complex work in area of assignment.

Communicate clearly and concisely, both orally and in writing.

Establish and maintain effective working relationships with those contacted in the course of work.

Work with various cultural and ethnic groups in a tactful and effective manner.

Experience and Training

Any combination of experience and training that would likely provide the required knowledge and abilities is qualifying. A typical way to obtain the knowledge and abilities would be:

Experience:

Four years of increasingly responsible experience in civil engineering design, construction, surveying or related field, including one year of supervisory responsibility.

Training:

Equivalent to a bachelor's degree from an accredited college or university with major course work in civil engineering or a related field.

License or Certificate

Possession of a certificate of registration as a professional civil engineer in the State of California.

PHYSICAL DEMANDS

On a continuous basis, sit at desk, stand, or walk for long periods of time; step over exposed footing and climb down into open areas to perform inspections; perform simple grasping and fine manipulations; use telephone, and write or use a keyboard to communicate through written means; and lift or carry weight of 15 pounds or less. See in the normal vision range with or without correction to read typical business documents, computer screens, blueprints, and drafting plans; hear in the normal range with or without correction.

WORKING ENVIRONMENT

Primary work is performed within an even-floored, carpeted and air-conditioned office environment with fluorescent lighting and moderate noise level. Some fieldwork is required with exposure to outside atmospheric conditions, traffic, noise, physical barriers, or around potentially hazardous construction conditions, substances and material.

5/05